REMARKS

Claims 1, 4, 11, 12, 23-25, 29 have been amended and Claim 5 has been canceled to place the case in condition for allowance. Reconsideration is respectfully requested.

Claims 5, 13, 15, 25 have been indicated as allowable.

Accordingly, Claim 1 has been amended to include the limitations of a neural network and fuzzy filter from allowable Claim 5 and intervening Claim 4. The limitation of the algorithm which adapts to the individual entity, which the Examiner considers to be shown by Pavlou and to not be a patentable feature, has been removed from Claim 1 and inserted in Claim 4. Claim 5 has been canceled.

Claim 11 is very similar to Claim 1, except narrower in scope, since the broader terms "condition" and "entity" have been limited to a particular condition and entity, a "disease or other medical condition" and "person" but the claims are otherwise similar in the steps of selecting, detecting, and processing. Thus Claim 11 has been amended similarly to Claim 1 by adding the neural network with fuzzy filters and removing the individually adaptive algorithm. If Claim 1 is allowable with these limitations, then Claim 11 must also be allowable.

Claim 23 has been amended to include the neural network features of allowable Claim 25 and intervening Claim 24. The algorithm adapted to the individual entity has been removed from Claim 23 and added to Claim 25, as was done with Claims 1 and 11 since the Examiner does not consider this to be a patentable feature. The artificial olfactory detector has been left in Claim 24 since it appears to be irrelevant to patentability, i.e. patentability is based on the artificial neural network with fuzzy filter processor and not the detector.

Claims 9, 29 have previously been withdrawn from consideration but should be rejoined since they depend from allowable claims. Claim 8 is directed to a nonelected species of the entity whose condition is being determined, i.e. "food" using particular markers "characteristic of food degradation." Since generic Claim 1 is allowable then all species claims dependent therefrom should be allowed.

Claim 29 was previously amended to depend from Claim 25 and now from Claim 23. The Examiner has maintained that the new Claim 29 is directed to an invention that is independent or distinct from the invention originally claimed. Claim 29 was originally directed to a neural network itself, which may have been independent or distinct from the detecting apparatus of Claim 23. But, as amended, Claim 29 only further limits the neural network feature of Claim 23. Amended Claim 23 recites a neural network with fuzzy filters associated with either the input layer or a hidden layer or both (from Claim 25). Claim 29 further limits this neural network structure to at least two hidden layers (and an input and an output layer, which all neural networks must have) and the fuzzy filters being associated with (forming nodes of) the second hidden layer. Claim 23 recited a hidden layer, which encompasses more than one hidden layer. Claim 23 encompasses the fuzzy filters being associated with a hidden layer, which may be the second layer. Thus if Claim 23 is allowable, Claim 29 must also be allowable since it further limits the base claim. No additional search is required.

Therefore, all the rejections on the merits have been rendered moot. Applicant makes these amendments without prejudice to the filing of a continuation application to further pursue further claims. Nothing in this response is to be construed as an admission that any of the rejected claims are unpatentable.

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Accordingly it is submitted that this proposed amendment would place all claims

now present in the case in condition for allowance which is earnestly solicited. The

Examiner is requested to contact Applicant at (415) 824-5729 to indicate if this proposed

amendment is acceptable and if a final version is required.

Respectfully submitted,

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